

Work stress and burnout among high tech shift workers in southern Taiwan
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Objective: Work stress, which might lead to the accumulation of stress and in turn lead to various physical and mental illnesses, has become an important issue among workers in the high-tech industry. In recent years, there were many reports on the chronic fatigue associated with work stress, but few were from Taiwan. Therefore, we conducted a study to evaluate the associations between work stress and burnout among high tech workers.

Materials and Methods: We recruited workers working in a scientific park in southern Taiwan between October 1 and December 31, 2010. Information on demographic characteristics was collected through a self-administrated questionnaire. Participants also completed a job content questionnaire and reported habits of smoking and drinking.

Results: There were 774 workers participated in this study. We observed positive associations between work stress and age, marriage status, shift work, work position, perceived stress, economic stress, insomnia, depression, burnout for personal reasons, work-related burnout, over-commitment, and client-related burnout (all with $p < 0.05$). After adjusting for other factors, we found male gender (adjusted odds ratio [AOR] = 2.09, 95% confidence interval [CI]: 1.26-3.49), shift work (AOR = 1.93, 95% CI: 1.24-3.03), mild depression (AOR = 1.69, 95% CI: 1.03-2.75), severe depression (AOR = 5.35, 95% CI: 1.59-18.04), work related burnout (AOR = 5.76, 95% CI: 2.00-16.59), and over-commitment (AOR = 2.12, 95% CI: 1.07-4.18), were independent risk factors of work stress.

Conclusion: Among the high tech shift workers, work stress is associated with male gender, shift work, depression, work-related burnout and over-commitment. Therefore, intervention strategies for work stress should take into consideration these factors.

Key words: shift work, work stress, job content questionnaire and work fatigue.